A Tabu Search Algorithm For Maintenance Scheduling Of Generating Units

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Summary

A new heuristic algorithm based on the Tabu search has been proposed for the maintenance schedule (MS) of electric generation units. The algorithm was developed, implemented and tested on an integrated model for the MS problem. The model. used two criteria: minimizing the total generator operating cost and levering the reserve. Each of the above criteria is used with the following constraints: maintenance completion, crew size, precedence, reserve and reserve constants. The performance of the Tabu search algorithm is promising. The Tabu search algorithm solved two power system problems, 4 units and 22 units. The implicit enumeration algorithm was used to check the validity and the quality of the Tabu search solution.

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